

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1-14, 16-18, 20-22, 24-26, 28-30, 32-34, and 36 and ADD new claim 37 in accordance with the following:

1. (CURRENTLY AMENDED) A switching device for controlling a connection between at least one private computer, at least one terminal corresponding to the at least one private computer, and a shared computer that can be operated by the at least one terminal, the switching device comprising:

a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the shared computer when a connection switching request transmitted from said terminal has been received; and

a security unit that executes for each terminal, an identification processing of ~~to the~~ data that has been received from any one terminal and output to the private computer or the shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code.

2. (CURRENTLY AMENDED) The switching device according to Claim 1, wherein the security unit comprises:

an enciphering unit that executes an enciphering processing ~~own to~~ local to each terminal, of ~~to the~~ data that has been transmitted from any one terminal and received by the switching device;

a first deciphering unit that executes a deciphering processing corresponding to the enciphering processing ~~own to~~ local to the terminal corresponding to the at least one private computer, ~~to of~~ the data that has been output from the switching device to any one private computer; and

a second deciphering unit that executes a deciphering processing corresponding to the enciphering processing ~~own to~~ local to the terminal currently connected to the shared computer, ~~to of~~ the data that has been output from the switching device to the shared computer.

3. (CURRENTLY AMENDED) The switching device according to Claim 2, wherein the enciphering unit bit shifts the received data to a first direction between a highest bit and a lowest bit by only a number of each terminal, the first deciphering unit bit shifts the output data to a second direction opposite to the first direction by a number of a terminal corresponding to the at least one private computer, and the second deciphering unit bit shifts the output data to a second direction opposite to the first direction by a number of a terminal currently connected to the shared computer.

4. (CURRENTLY AMENDED) The switching device according to Claim 1, wherein the connecting unit comprises:
a detecting unit that detects whether or not a key code of a predetermined key transmitted from any terminal has been received by a predetermined number during a predetermined period of time; and

a switching unit that cancels a connection of the terminal when the terminal has been connected to the shared computer, and switches the connection to a private computer corresponding to the terminal, that cancels a connection of the terminal when the terminal has been connected to a private computer corresponding to the terminal, and switches the connection to the shared computer, and that disregards the connection switching request when a terminal other than the corresponding terminal has already been connected to the shared computer, at ~~the~~ a time when the detecting unit has performed detecting~~detected the above~~.

5. (CURRENTLY AMENDED) The switching device according to Claim 1, further comprising a posting unit that posts a connection status of the shared computer to each terminal.

6. (CURRENTLY AMENDED) The switching device according to Claim 5, wherein the posting unit posts to each terminal, that the shared computer is currently being used, when the shared computer is currently being connected to any terminal.

7. (CURRENTLY AMENDED) A switching method in a switching device for controlling a connection between at least one private computer, at least one terminal corresponding to the at least one private computer, and a shared computer that can be operated by the at least one terminal, the switching method comprising:

~~a connection step at which each terminal is connected~~ each terminal to a corresponding private computer in a default status, and a connection destination of the terminal is switched to a private computer corresponding to said terminal or the shared computer when a connection switching request transmitted from said terminal has been received; and

~~a security step at which an identification processing for each terminal is executed on the data that has been received from any one terminal and output to the~~ at least one private computer or the shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code.

8. (CURRENTLY AMENDED) The switching method according to Claim 7, wherein the security ~~step~~ comprises:

~~an enciphering step at which an enciphering processing of each terminal is executed on the data that has been transmitted from any one terminal and received by the switching device;~~

~~a first deciphering step at which a deciphering processing corresponding to the enciphering processing of the terminal corresponding to the~~ at least one private computer is executed to ~~of the data that has been output from the switching device to any one private computer; and~~

~~a second deciphering step at which a deciphering processing corresponding to the enciphering processing of the terminal currently connected to the shared computer is executed to~~ for the data that has been output from the switching device to the shared computer.

9. (CURRENTLY AMENDED) The switching method according to Claim 8, wherein ~~at the~~ during the enciphering processing step, the received data is bit shifted to a first direction between a highest bit and a lowest bit by only a number of each terminal,

~~at the~~ during the first deciphering processing step, the output data is bit shifted to a second direction opposite to the first direction by a number of a terminal corresponding to the at least one private computer, and

~~at the~~ during the second deciphering processing step, the output data is bit shifted to a second direction opposite to the first direction by a number of a terminal currently connected to the shared computer.

10. (CURRENTLY AMENDED) The switching method according to Claim 7, wherein the connection ~~step~~ comprises:

~~a detection step at which it is detected~~ing whether or not a key code of a predetermined key transmitted from any terminal has been received by a predetermined number during a predetermined period of time; and

~~a switching step at~~during which a connection of the terminal is canceled when the terminal has been connected to the shared computer, and the connection is switched to a private computer corresponding to the terminal, a connection of the terminal is canceled when the terminal has been connected to a private computer corresponding to the terminal, and the connection is switched to the shared computer, and the connection switching request is disregarded when a terminal other than the corresponding terminal has already been connected to the shared computer, at the time when the above detection has been carried out ~~at the~~during the detectioning step.

11. (CURRENTLY AMENDED) The switching method according to Claim 7, further comprising ~~a posting step at which a connection status of the shared computer is posted to each terminal.~~

12. (CURRENTLY AMENDED) The switching method according to Claim 11, wherein ~~at during the posting step,~~ a state that the shared computer is currently being used is posted to each terminal, when the shared computer is currently connected to any terminal.

13. (CURRENTLY AMENDED) A computer system comprising:
at least one private computer;
a terminal corresponding to the at least one private computer;
at least one shared computer connected to a network; and
a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the shared computer, the switching device comprising:

a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the at least one shared computer when a connection switching request transmitted from said terminal has been received; and

a security unit that executes, for each terminal an identification processing on the data that has been received from any one terminal and output to the at least one private computer or the at least one shared computer, said identification processing including utilizing an identifier

corresponding to a connector through which a terminal is connected to encipher a received key code.

14. (CURRENTLY AMENDED) The computer system according to Claim 13, wherein the at least one shared computer is connected to a ~~further~~ second network independent of said network.

15. (ORIGINAL) The computer system according to Claim 13, wherein the network is the Internet.

16. (CURRENTLY AMENDED) The computer system according to Claim 14, wherein the ~~further~~ second network is an intranet.

17. (CURRENTLY AMENDED) A computer system comprising:
at least one private computer;
a terminal corresponding to the at least one private computer;
at least one shared computer connected to a network; and
a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the at least one shared computer, the switching device comprising:

a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the shared computer when a connection switching request transmitted from said terminal has been received; and

a security unit that executes for each terminal an identification processing on the data that has been received from any one terminal and output to the at least one private computer or the shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code, the security unit comprising:

an enciphering unit that executes an enciphering processing of each terminal, ~~to of~~ the data that has been transmitted from any one terminal and received by the switching device;

a first deciphering unit that executes a deciphering processing corresponding to the enciphering processing of the terminal corresponding to the at least one private computer, on the data that has been output from the switching device to any one private computer; and

a second deciphering unit that executes a deciphering processing corresponding to the enciphering processing ~~own to local~~ to the terminal currently connected to the shared computer, on the data that has been output from the switching device to the shared computer.

18. (CURRENTLY AMENDED) The computer system according to Claim 17, wherein the at least one shared computer is connected to a ~~further~~ second network independent of said network.

19. (ORIGINAL) The computer system according to Claim 17, wherein the network is the Internet.

20. (CURRENTLY AMENDED) The computer system according to Claim 18, wherein the ~~further~~ second network is an intranet.

21. (CURRENTLY AMENDED) A computer system comprising:
at least one private computer;
a terminal corresponding to the at least one private computer;
at least one shared computer connected to a network; and
a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the at least one shared computer, the switching device comprising:

a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the shared computer when a connection switching request transmitted from said terminal has been received; and

a security unit that executes for each terminal an identification processing on the data that has been received from any one terminal and output to the at least one private computer or the at least one shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code, the security unit comprising:

an enciphering unit that executes an enciphering processing of each terminal, on the data that has been transmitted from any one terminal and received by the switching device, the enciphering unit for bit shifting the received data in a first direction between a highest bit and a lowest bit by a number of each terminal;

a first deciphering unit that executes a deciphering processing corresponding to the enciphering processing of the terminal corresponding to the at least one private computer, on the data that has been output from the switching device to any one private computer, the first deciphering unit for bit shifting the output data to a second direction opposite to the first direction by a number of a terminal corresponding to the at least one private computer; and

a second deciphering unit that executes a deciphering processing corresponding to the enciphering processing of the terminal currently connected to the shared computer, on the data that has been output from the switching device to the shared computer, the second deciphering unit for bit shifting the output data to a second direction opposite to the first direction by a number of a terminal currently connected to the at least one private computer.

22. (CURRENTLY AMENDED) The computer system according to Claim 21, wherein the at least one shared computer is connected to a ~~further~~-second network independent of said network.

23. (ORIGINAL) The computer system according to Claim 21, wherein the network is the Internet.

24. (CURRENTLY AMENDED) The computer system according to Claim 22, wherein the ~~further~~-second network is an intranet.

25. (CURRENTLY AMENDED) A computer system comprising:
at least one private computer;
a terminal corresponding to the at least one private computer;
at least one shared computer connected to a network; and
a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the at least one shared computer, the switching device comprising:

a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the at least one shared computer when a connection switching request transmitted from said terminal has been received, the connecting unit comprising:

a detecting unit that detects whether or not a key code of a predetermined key transmitted from any terminal has been received by a predetermined number during a

predetermined period of time; and

a switching unit that cancels a connection of the terminal when the terminal has been connected to the at least one shared computer, and switches the connection to a private computer corresponding to the terminal, that cancels a connection of the terminal when the terminal has been connected to a private computer corresponding to the terminal, and switches the connection to the at least one shared computer, and that disregards the connection switching request when a terminal other than the corresponding terminal has already been connected to the at least one shared computer, at the time when the detecting unit has performed ~~detecting the above~~; and

a security unit that executes, for each terminal, an identification processing on the data that has been received from any one terminal and output to the at least one private computer or the at least one shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code.

26. (CURRENTLY AMENDED) The computer system according to Claim 25, wherein the at least one shared computer is connected to a ~~further~~ second network independent of said network.

27. (ORIGINAL) The computer system according to Claim 25, wherein the network is the Internet.

28. (CURRENTLY AMENDED) The computer system according to Claim 26, wherein the ~~further~~ second network is an intranet.

29. (CURRENTLY AMENDED) A computer system comprising:
at least one private computer;
a terminal corresponding to the at least one private computer;
at least one shared computer connected to a network; and
a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the at least one shared computer, the switching device comprising:

a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer

corresponding to said terminal or the at least one shared computer when a connection switching request transmitted from said terminal has been received;

a security unit that executes for each terminal an-identification processing to-on the data that has been received from any one terminal and output to the at least one private computer or the at least one shared computer, said identification processing including utilizing an identifier corresponding to a connector through which a terminal is connected to encipher a received key code; and

a posting unit that posts a connection status of the at least one shared computer to each terminal.

30. (CURRENTLY AMENDED) The computer system according to Claim 29, wherein the at least one shared computer is connected to a further-second network independent of said network.

31. (ORIGINAL) The computer system according to Claim 29, wherein the network is the Internet.

32. (CURRENTLY AMENDED) The computer system according to Claim 30, wherein the further-second network is an intranet.

33. (CURRENTLY AMENDED) A computer system comprising:
at least one private computer;
a terminal corresponding to the at least one private computer;
at least one shared computer connected to a network; and
a switching device disposed between the at least one private computer and the terminal, for relaying data between the terminal and the at least one shared computer, the switching device comprising:

a connecting unit that connects each terminal to a corresponding private computer in a default status, and switches a connection destination of the terminal to a private computer corresponding to said terminal or the shared computer when a connection switching request transmitted from said terminal has been received;

a security unit that executes for each terminal an-identification processing to of the data that has been received from any one terminal and output to the at least one private computer or the at least one shared computer, said identification processing including utilizing an identifier

corresponding to a connector through which a terminal is connected to encipher a received key code; and

a posting unit that posts a connection status of the shared computer to each terminal, the posting unit for posting to each terminal that the at least one shared computer is currently being used, when the at least one shared computer is currently being connected to any terminal.

34. (CURRENTLY AMENDED) The computer system according to Claim 33, wherein the at least one shared computer is connected to a ~~further~~second network independent of said network.

35. (ORIGINAL) The computer system according to Claim 33, wherein the network is the Internet.

36. (CURRENTLY AMENDED) The computer system according to Claim 34, wherein the ~~further~~second network is an intranet.

37. (NEW) A switching device for controlling a terminal connection, comprising:

a connection unit adapted to connect a terminal to a private computer or a shared computer; and

an identification processing unit coupled to said connection unit and adapted to utilize an identifier corresponding to a connector through which said terminal is connected to encipher a received code.